



RECREATION ISSUES COMMITTEE

November 26, 1999

Clifford Hawks
12795 West Alameda Parkway
Lakewood, CO 80228

STATEMENT OF THE SIERRA CLUB - RECREATION ISSUES COMMITTEE,
RE: WINTER USE PLAN: Draft EIS - Yellowstone National Park
prepared by Dick Hingson, PO Box 630132, Rockville, UT 84763

Dear Clifford Hawks:

These comments pertain to the various Natural Quiet and Noise elements within the Draft EIS and its Appendices. (More comprehensive Sierra Club comments are being submitted by the Sierra Club's Yellowstone Ecosystem Task Force separately.)

The Sierra Club's Principles concerning Natural Quiet are similar to NPS' articulation on Page 126, but are elaborated along some additional lines NPS might usefully incorporate within its Final EIS. They are as follows:

PRINCIPLES ON NATURAL QUIET IN NATIONAL PARKS

- (I) *The sounds and silences of nature are among the intrinsic elements which combine to form the natural environment. Natural sounds amidst intervals of stillness are inherent components of the "scenery and the natural and historic objects and the wildlife" within National Parks.*
- (II) *Visitors to National Park System units have a right to experience all of the natural environment unimpaired. Within units of these Systems, natural quiet—the extended opportunity to experience simply natural sounds amid periods of deepest silence—must be preserved for the enjoyment and inspiration of present and future generations.*

- (III) *An important value of our National Parks—not to be lost—is as protected, often vast, places of astonishing beauty and wildness. Each has thereby a distinct and powerful aura, fully dependent upon the oft-subtle natural sounds and the hush. As such, they afford unique opportunities for undistracted respite, solitude, contemplative recreation, inspiration, and education.*

Further, these units also provide scarce refuge and undisturbed natural habitat for animals. Artificial, human-generated noise can interfere with sensitive animal behavior. Such noise also degrades the aura, the special presence of place, with its sense of primeval character and solitude.

Therefore, thrill-seeking and noisy sorts of experiences which disturb the peace are not normally appropriate demands for our National Park or Wilderness Preservation Systems. Those experiences could be provided by the private sector, elsewhere.

We first provide comment on the Volume II Appendices. That lays background for our subsequent emphases re Volume I.

Re: Volume II, Appendix C, Sound and Natural Quiet: NPS Policy Excerpts from NPS Report on Effects of Aircraft Overflights on the National Park System (Report to Congress):

Re the Question (an important one for this Yellowstone plan): What Is Natural Quiet?:

(First, this technical note): To include the numbered "Conclusion Cites" for all, not just some paragraphs, would strengthen this portion. This is important for future references.

Thus, the Cite re "Page 78, 'What is Natural Quiet?'" should further key it as "Conclusion 3.2.1." To this, in the Final EIS, furthermore please add and cite the following key "bullet", taken from Conclusion 3.4 of the same NPS Report, namely, that the quiet to be preserved/restored is "the quiet at the lower end of the ambient sound level range that occurs regularly between wind gusts, animal sounds, etc., not just the average sound level."

Re: Volume I, Chapter III, Pages 126-129

NPS' "Natural Quiet" section does state important principles and description. *However, it would be greatly improved by drawing upon the extensive scientific research, analysis and literature of the past 10 years at Grand Canyon National Park (GCNP) with respect to natural quiet vs. air tour noise. It could be improved still further through examination of the newly published, detailed studies on ambient natural quiet at Everglades National Park (see References.)*

Various Environmental Assessments, the related Supplemental EA's and Reports from the Federal Aviation Administration (FAA) and NPS—all associated with rulemaking for the aircraft

tours at Grand Canyon National Park-- and subsequent NPS ambient sound studies at the Everglades NP, should immediately be reviewed. Their content should suggest how to analyze and map the background natural ambient and audibility thresholds of the motorized impacts on Yellowstone.

Techniques of computerized noise modeling such as those recently "ground-truthed" at GCNP (Report due Spring of 2000) may also be useful in the final EIS for this Winter Use Plan, or in adaptive management later.

Sierra Club disagrees with the implication on Page 129, paragraph 2, that "aviation policies in place" actually "minimize" aircraft overflights of the national parks. At best, they mitigate these intrusions somewhat. These policies are voluntary guidelines only. They are frequently violated by low-flying general aviation, even air tours (!), as at Grand Canyon, Bryce, Canyonlands, and other national parks. High altitude commercial and private jets, and other general aviation, produce plenty of audible noise intruding into many otherwise quiet Western national parks, Yellowstone being no exception. This needs to be acknowledged and scientifically assessed. The substantial amount of aviation noise is *exponentially increasing with the growth of the industry.*

Re: Background Sound Levels Appear Significantly Over-Estimated.

Examination of the 1996 Bowlby and Associates Report from Grand Teton NP reveals little systematic product to actually define the "low-end ambient" referred to above. Missing or lost appendices (which exhibit the raw data) further compound the confusion.

The instrumentation appears to likely have been too imprecise or insensitive to accurately measure ambient ranges of 0 to 25 decibels, certainly in comparison to the newly available NPS equipment. Most of the findings for this low-end range appear to be anecdotal or casual. Thus assertions or implication that the natural winter low-end ambient is of the order of 30 decibels simply cannot be taken seriously, given the absence of more systematic studies/analyses such as those carried out recently at the Grand Canyon or the Everglades.

It appears likely from those that the low-end ambient to be protected/restored in winter season Yellowstone is often much lower: 10 or 15 decibels. Table 16, "Background Sound Level," therefore needs to be re-calculated now and adaptively as more detailed data becomes available. Its title probably also should be changed, to "Background Natural Ambient", and appropriately footnoted. This will reflect the NPS finding of Conclusion 3.4 in its 1995 Report as cited above.

Re: Volume I, Chapter IV, Pages 171 and 172:

The audibility metrics and threshold criteria being introduced at GCNP and the Everglades should be more fully considered for Yellowstone.

Pages 171-172 thus need considerable re-working. "Per Cent Time Audible" (%TA) is a key

metric routinely used in the FAA/NPS Grand Canyon environmental assessments, but it has not been demonstratively charted or mapped for Yellowstone with reference to the current deluge of snowmobiles ("No Action"), nor for any other alternatives. *What is the %TA for snowmobiles, or for snow-coaches along the West Yellowstone to Old Faithful route, for example? Or for any other access route, contemplated or actual? How much does %TA increase on peak days, or during peak hours, compared to the average?*

The implication that it was so calculated, in either the Friemund et al. (1997) or in the Borrie et al. (1999) studies, appears at best careless. At worst it is a deliberate falsification of the record. Such calculations or charting are *not* published in either report, in any case, certainly not in this draft EIS.

Volume I, Chapter IV, Pages 192-193, Alternative "A", Impacts on Natural Quiet

The natural "low-end" ambience has been *erroneously inflated* to as high as 30 dB. Tables 42-43 thus need to be recalibrated to reflect the actual (lower) ambient. The same holds true for Table 47 on Page 214 for Alternative B, and so on. Furthermore, *can %TA now be provided for various sites along, and at various distances from, each snowmobile or snowcoach route?*

Annoyance levels for various levels of %TA and attitudes about natural quiet might better be determined, not mostly from the snowmobile users themselves (as in the Friemund et al studies) but from a cross-section of the people visiting, or who potentially might visit, snow-bound parks (for example, Grand Canyon or Yosemite or Glacier) where snowmobiles are not now admitted. It can be hypothesized that winter snowmobile users (as with summer motorcyclists) would as a whole be less concerned with the *noise* environment of the park, compared with other potential or actual users. The natural quiet thus becomes devalued, to the detriment of others more fully attuned to Yellowstone's uniquely hushed, high-fidelity winter landscape and soundscape.

These remarks do not represent an exhaustive analysis or critique of the problems with the Natural Quiet element in this document. They are, however, illustrative of data that is vague, or otherwise omitted, or mis-stated, or without foundation. Inadequate data or findings potentially can be a disservice to Natural Quiet characterization or protection, thus to the whole aura of this premier Park. Greater precision can be found by drawing upon the recent technical and environmental documentation developed for the GCNP and the Everglades NP. NPS is encouraged to apply these rich data sources, new technology, and analytical insights, to the present Yellowstone analysis of Natural Quiet, and to the impacts of massive, noisy snowmobile intrusion thereon.

(Signed) *Dick Hingson*

Dick Hingson, Vice-Chair
Sierra Club - Recreation Issues Committee

REFERENCES:

1. USNPS (National Park Service, U.S. Department of the Interior), 1995, "Report on Effects of Aircraft Overflights of Units of the National Park System." Washington.
2. Richard L. Ernenwein, "Aircraft Overflights and the U.S. National Park System, An Overview," in "On the Frontiers of Conservation: Proceedings of the 9th Biennial Conference on Research and Resource Management in Parks and On Public Lands," George Wright Society, Hancock, Michigan, 1997.
3. William B. Schmidt, "The Protection of the Soundscapes of the South Florida Parks", in "On the Frontiers of Conservation: Proceedings of the 10th Biennial Conference on Research and Resource Management in Parks and On Public Lands," (In Press, due December 1999), George Wright Society, Hancock, Michigan.
4. FAA (Federal Aviation Administration), Supplemental Environmental Assessment, "Special Flight Rules in the Vicinity of Grand Canyon National Park." (And all antecedent Rulemaking Environmental Documents). (In Press, due December 1999).
5. See generally: Joseph Sax, "Mountains Without Handrails: Reflections on the National Parks", University of Michigan Press, Ann Arbor, 1980.

SIERRA CLUB RECREATION ISSUES COMMITTEE	
Page 1. Re: Sierra Club's Principles Concerning Natural Quiet. Natural quiet is governed sufficiently by regulations and policies excerpted in DEIS Appendix C. This direction forms a part of the purpose and need for action.	
Pages 2. Re: Volume II, Appendix C, include the numbered "Conclusion Cites". Volume II will not be revised.	
Page 2. Include addition citations on natural quiet from the Grand Canyon and Everglades. The CEQ regulations do not require exhaustive and voluminous discussion, especially when the discussion can be characterized as background (§1500.4 (f)). The amount of detail to be included in an EIS should be that level which is relevant to the decision to be made, and preparing analytic as opposed to encyclopedic documents (§1500.4 (b)). The regulations recommend page limits on documents, which the draft EIS already exceeds.	
Page 3. Re: Acknowledge and assess the real effect of aircraft on the parks. Aircraft effects are considered in the cumulative impact analysis on parks. They are not the focus for study in the winter use EIS.	
Page 3. Re: Credibility of Bowlby study. New information is now available on sound and will be incorporated into the FEIS.	
Page 3. Re: Recalculate background sound level (Table 16). New information is now available on sound and will be incorporated into the FEIS.	
Page 3. Re: Use %TA for sound analyses. New information is now available on sound, including %TA, and will be incorporated into the FEIS.	
Pages 4. Re: NPS implies that %TA was calculated in Borrie et al. (1999) or in Friemund et al. (1997). There is no implication intended. The sound analysis will be updated in the FEIS.	
Page 4. Re: 1.) "Low-end" ambience is erroneously inflated in DEIS. 2.) Can %TA now be provided? New information is now available on sound, including %TA, and will be incorporated into the FEIS.	
Page 4. Re: Survey regarding attitudes about natural quiet was biased. NPS clearly states the parameters of the surveys. NPS also indicates (DEIS pages 153-154) that natural quiet, as defined by solitude and an expectation of hearing the sounds of nature, are among the most important reasons that people visit national parks.	